

AE Requirements for Electronic Bid Sets (EBS)**A. GENERAL**

The Electronic Bid Sets (EBS) project consists of a standard for delivery and distribution of electronic solicitation. A procedure was developed in which potential bidders may view project plans, specifications, and contract documents on a CD-ROM. In order to view the solicitation documents, bidders need only have a Windows-based personal computer with a CD-ROM drive. Two royalty-free viewers are included on the CD-ROM to enable users to utilize the documents. One viewer enables bidders to view and print all text based documents (specifications and contract clauses) and the other viewer is used to view and print graphic documents (drawings). A simple icon based menu was developed to assist the user in manipulating through the documents and software.

B. CD-ROM FORMAT

The following is the directory structure which will be adhered to for the CD-ROM:

\Plans*.CALS	Plans in CALS format
\Plans\INDEX.TXT	Index of Plans in ASCII format
\SPECS*.PDF	Specifications in PDF

File Extensions:

File Ext.	Description	Program
TXT	Files in ASCII format.	Text Editor
PDF	Adobe's PDF files.	Acrobat Reader
CAL	CALS Group 4 graphic file.	MaxView Reader

C. SOFTWARE REQUIREMENTS

The following software is required for the EBS submittal in addition to the normal CADD and word processing software.

- (1) Adobe Acrobat Exchange For compiling and creating PDF files and distributing the Specifications Reader. (for sale from Adobe at the following web address <http://www.adobe.com>).
- (2) Text Editor For creating the drawing index file. Windows Notepad is a text editor.
- (3) CALS Viewer For quality check of CALS files
Available from Maxview site (no Cost)
- (4) CALS print driver For Creating the CALS files from CADD files.

The following are known software packages, which have been used for creating CALS files from native CADD files. The designer is not limited to using these and they are listed for information only.

- a. Dimensional CALS Type 1 (CCITT G4 2D Compression) driver – Included with AutoCAD (Supports grayscale and screening).
- b. Interplot Raster Offline Driver Pack - from Bentley is a windows printer driver which works with any windows NT program, supports IPLOT configurations and will plot from AutoCad without needing APLOT. (Supports grayscale and screening).
- c. MaxCapture available from Maxview.

The Maxview CALS Viewer is available at the following address:

<http://www.maxview.com>

Autodesk Design Review is available for viewing and plotting CAL files. It is available at:

<http://usa.autodesk.com/adsk/servlet/index?id=6703438&siteID=123112&DCMP=ILC-DWG-PUV>

D. GRAPHIC FORMAT

DRAWINGS

- (1) Each drawing must be plotted or scanned to a CALS Type 1 Group 4 format raster file (.CAL) at 400dpi. The submitted CALS raster files shall be exact duplicates (proper scale, line weights, gray scale or screening, quality etc.) of the normally submitted contract drawings hard copy (blue line or mylar) set and will be distributed to bidders instead of paper copies (blue lines). There will be one CALS file submitted for each drawing sheet in the set. Each CALS file shall be named to reflect its sheet file name (A/E/C CADD Standard).
- (2) An ASCII text file of the index of drawings cross-referenced to the CALS file name shall be submitted in the following space delineated format:
Sheet Filename.cal Sheet number Sheet title as shown in the drawing index
for example:
123AE101xxx.cal AE101 First Floor Plan
123AE102xxx.cal AE102 Second Floor Plan
See Figure 1 for an example of the required text file format.

SPECIFICATIONS

The Specifications (Div. 1-16) must be submitted compiled and bookmarked using the Adobe Acrobat .PDF file format. The bookmarks shall consist of section numbers and names. The compiled PDF file shall include the project table of contents, all specifications, attachments, and the combined submittal register. Because of website file size considerations, scanning documents to .PDF format should be avoided whenever possible. If unavoidable the documents shall be scanned in black and white at a maximum resolution of 200 dpi. The submitted files must be readable using the Adobe Acrobat Reader, (version 5.0), which will be distributed on the EBS CD without any additional software programs required to be installed. It is the responsibility of the AE to ensure this level of compatibility.

E. QUALITY CONTROL

Drawings:

1. Quality checks for CALS files.
 - a. View each CALS file for completeness. (is the drawing displaying as the designer intended.
 - b. Verify that each drawing is the correct scale by measuring the width and height of each sheet. The distance should be the same as a full size printed sheet.
2. Quality checks for Index file.
 - a. Check file list to ensure it includes all drawing sheets and is in the proper format.
 - b. View each drawing in set making sure a drawing appears for each sheet listed in the index.

Specifications:

Quality checks for the .PDF files.

- a. Page through each document, making sure that each section displays completely and correctly.
- b. View all scanned images to ensure they are legible and printable.
- c. Check that the table of contents is correct and corresponds to the bookmarked file submitted.

F. ELECTRONIC DELIVERY MEDIA AND FORMAT

In addition to the normal review submittals, an EBS CD shall be submitted at the 90% for review of the CD structure, content and usability. One separate set of CALS files along with the EBS index shall be delivered to the Government on electronic digital media at the EBS submittal. All electronic digital data, CALS raster files and Adobe PDF file shall be provided on compact disc, read-only memory (CD-ROM) following ISO 9660 format. No compression or backup utilities shall be used to store the files on the CD-ROM.

G. FINAL SUBMITTAL FOR BID

The final bid submittal package for EBS will consist of a CD with the following:

- a. One ASCII text file, drawing index file
- b. One set of drawings in .cal format, each drawing in a separate CALS file.
- c. The complete specification file compiled and bookmarked in Adobe .pdf format.
- d. The signature sheet either in a CALS file or full size hard copy, signed and sealed in accordance with SOP 1110-345-1 "Approval of Design Documents".

Sample format: ASCII Drawing Index File:

123G-001xxx.cal	G-001	COVER SHEET
123C-001xxx.cal	C-001	SURVEY INFORMATION AND VICINITY MAP
123C-101xxx.cal	C-101	EXISTING CONDITIONS
123C-102xxx.cal	C-102	DEMOLITION PLAN
123C-103xxx.cal	C-103	LAYOUT PLAN
123C-104xxx.cal	C-104	GRADING AND DRAINAGE PLAN
123C-105xxx.cal	C-105	UTILITIES PLAN
123C-106xxx.cal	C-106	SEDIMENT AND EROSION CONTROL PLAN
123B-101xxx.cal	B-101	BORING LOCATION PLAN
123B-601xxx.cal	B-601	SUBSURFACE EXPLORATION BORING LOGS & NOTES
123A-101xxx.cal	A-101	FLOOR PLAN
123A-102xxx.cal	A-102	ROOF PLAN
123A-103xxx.cal	A-103	REFLECTED CEILING PLAN
123A-201xxx.cal	A-201	BUILDING ELEVATIONS
123A-301xxx.cal	A-301	WALL SECTIONS
123A-401xxx.cal	A-401	TOILET PLAN ENLARGEMENT AND ELEVATIONS
123A-501xxx.cal	A-501	FLOOR PATTERN DESIGNS
123I-101xxx.cal	I-101	FURNITURE PLAN
123S-101xxx.cal	S-101	ROOF PLAN
123M-101xxx.cal	M-101	PACKAGE ROOF TOP AC FLOOR PLAN

FIGURE 1